

REMARKS

Reconsideration of this application in view of the claim amendments and the following remarks is respectfully requested. Claims 1, 3, 5, 8, 12 and 14 are amended with this response. Claims 20-33 are added. Claims 1-33 are pending.

Claim 3 was rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the Office Action asserted that, within claim 3, "the device" lacks antecedent basis. Please note that claim 3 was also listed as being allowed under the Allowable Subject Matter portion of the Office Action. However, claim 3 has been amended to replace "the device" with "the remainder of the apparatus." Claim 3 should now be clearly allowable, which action is respectfully requested.

Claims 5,9, 11-13 and 15-17 were rejected under 35 USC 102(b) as being anticipated by Wilson (4,387,472).

Claims 5, 7-9, 11-13 and 15-17 were rejected under 35 USC 102(b) as being anticipated by Sabolich et al. (6,500,210).

Claims 5, 7-12 and 14-17 were rejected under 35 USC 102(b) as being anticipated by Helmy (5,888,230).

Claim 5 has been amended to recite, in part, an apparatus for monitoring the environment of the prosthetic socket of an artificial limb having a residual limb contained therein, including at least one sensor positioned at least partially within a wall of the socket for sensing at least one of pressure, force, temperature and moisture. None of the cited references teach or disclose an apparatus as claimed, including a sensor positioned at least partially within a wall of the socket of the artificial limb.

In Wilson, the sensors are positioned at an interface between the foot and the leg pylon. [Col. 3, Lines 3-18] In Sabolich et al., the sensors are positioned in the foot with output elements, such as contacts, positioned in the socket of the prosthesis. These contacts provide a stimulus, such as an electrical current, to the residual limb, and do not sense force,

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pressure, temperature or moisture. [Col. 5, Lines 42-51; Col. 32-37] In Helmy, the pressure-sensitive transducers are disposed about the stump at locations spaced from each other. No socket is provided. [Abstract] Therefore, claim 5, as amended, is neither anticipated nor rendered obvious by the cited references. Applicant respectfully requests allowance of this claim.

Claims 6-11 depend from allowable claim 5 and thus are allowable for at least the same reasons. Applicant respectfully requests allowance of these claims.

Claim 12 has been amended to recite, in part, a method for monitoring aspects relating to a socket of a prosthetic limb and a residual limb contained therein, including the step of sensing at least one of pressure and force, and at least one of temperature and moisture, with respect to at least one of the socket, the residual limb and a space there between. None of the cited reference teach or disclosed the inventive method as claimed in amended claim 12.

In Wilson, Sabolich et al. and Helmy, only compressive forces or pressures are sensed, not temperature or moisture. In addition, none of the three references discuss the sensing of temperature or moisture. Therefore, claim 12 as amended is neither anticipated nor rendered obvious, and Applicant respectfully requests allowance of this claim.

Claims 13-19 depend from allowable claim 12, and thus are allowable for at least the same reasons. Applicant respectfully requests allowance of these claims, as well.

Claims 1-4 were allowed. Claims 6, 14 and 18-19 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 1 has been amended to remove the recitation of a vacuum sensor. Claim 21 has been added dependent on claim 1 to further include a vacuum sensor. Claim 1 is still allowable, as none of the cited references teach or disclose an apparatus having the remaining cited features. Claim 3 was amended to overcome the 112 rejection, as set forth above. Claim 6 depends from allowable claim 5 and claims 14 and 18-19 depend from allowable claim 12, and thus are allowable as previously stated.

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New claim 20 has been added to recite that the indicator of amended claim 5 comprises an audible alarm. Claim 20 depends from allowable claim 5, and thus is allowable for at least the same reasons. Applicant respectfully requests allowance of claim 20.

New claim 22 recites an apparatus for monitoring the environment of a socket of a prosthetic limb having a residual limb contained therein, including, in part, at least one of a pressure and a force sensor, at least one of a temperature and a moisture sensor, and a means for indicating values sensed by the sensors. As discussed above, none of the cited references either teach or disclosure such an apparatus. Therefore, claim 22 is allowable. Claims 23-26 depend from claim 22 and is thus allowable for at least the same reasons. Applicant respectfully requests allowance of these claims.

New claim 27 recites an apparatus for monitoring the environment of the prosthetic socket of an artificial limb having a residual limb contained therein, including a liner mountable over the residual limb and having a wall with the liner receivable within the socket; at least one sensor positioned at least partially within the wall of the liner for sensing at least one of pressure, force, temperature, and moisture, wherein the at least one sensor can be configured with value limits; and an indicator of when a value sensed by the at least one sensor is beyond a value limit.

None of the cited references teach or describe an apparatus including a liner having at least one sensor positioned at least partially within the wall of the liner. As stated above, the sensors of Wilson are positioned at the interface between the pylon and the foot, the sensors of Sabolich et al. are positioned in the foot, and the sensors of Helmy are positioned about the stump. Therefore, claim 27 is allowable, which action Applicant respectfully requests. Claims 28-33 are dependent from claim 27 and thus are allowable for at least the same reasons. Applicant also respectfully requests allowance of these claims.

CONCLUSION

All of the claims remaining in this application should now be seen to be in condition for allowance. The prompt issuance of a notice to that effect is respectfully solicited. If

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there are any remaining questions, the Examiner is requested to contact the undersigned at the number listed below.

Should any of the provided fees be incorrect, the Commissioner is authorized to charge or credit the Faegre & Benson Deposit Account No. 06-0029 as necessary, and is requested to notify us of the same.

Respectfully Submitted,

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